



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/824,663	04/14/2004	Vijay K. Bhagavath	1999-0494Con	7530

26652 7590 11/28/2007
AT&T CORP.
ROOM 2A207
ONE AT&T WAY
BEDMINSTER, NJ 07921

EXAMINER

RABOVIANSKI, JIVKA A

ART UNIT	PAPER NUMBER
----------	--------------

2623

MAIL DATE	DELIVERY MODE
-----------	---------------

11/28/2007

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/824,663

Applicant(s)

BHAGAVATH ET AL.

Examiner

Jivka Rabovianski

Art Unit

2623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-31 is/are rejected.
- 7) ☒ Claim(s) 12 - 13 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 4/14/04
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: ____

DETAILED ACTION

Claim Objections

1. Claim 12 and 13 are objected to because of the following informalities: the word "claim" in line 1 of each claim is misspelled. Appropriate correction is required.
2. Claim 24 is objected to because of the following informalities: the word "responsive" in line 3 of the claim should be – response--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. **Claims 1-2, 4, 11, 14 -15 and 18 – 20 are rejected under 35 U.S.C. 102(e) as being anticipated Sezan; M. Ibrahim (Sezan hereinafter) by US 6236395 B1.**

Regarding claim 1, Sezan discloses a method of providing summaries of audio/video programming to a recipient. A streaming programming signal was provide from a program source (see Fig. 2/ item 38) which may originate at a streaming programming signal (col. 7 lines 56 -59 – "The program 38 may originate at any suitable source, such as for example broadcast television, cable television, satellite television, digital television, Internet broadcasts, world wide web, digital video discs, still images, video cameras").

dividing programs into program segments each identified by index marks (see col. 7 lines 18 -21 – "With the overlapping fields, the system description scheme will be

capable of storing the information contained within the program description scheme, so that the information is properly indexed”);

summarizing each program segment into corresponding summary segments identified by similar index marks (see col. 8 lines 42 – 55 – “if the program 38 is a home video where there is no further information available then the analysis module 42 may create a key-frame summary by identifying key-frames of a multi-level summary and passing the information to be used to generate the program views”) Fig. 2 and 3/item 64 text processing and text summary generator and 72 – audiovisual analysis and feature extractor, 76 key-frame summarizer, 78 - a highlight summarizer (see col. 8, lines 42 - 55 – “if the program 38 is a home video where there is no further information available then the analysis module 42 may create a key-frame summary by identifying key-frames of a multi-level summary).;

storing the summary segments in a storage medium (see Fig. 2/ item 50 – data storage unit, which stores the summary segments (see col. 9 lines 4-8 – “The generation module 44 and the analysis module 42 provide data to a data storage unit 50. The storage unit 50 may be any storage device, such as memory or magnetic media” and col. 10 lines 4-8 – “If desired, the summarized information may be recorded onto a storage device, such as a DVD with a label”);

accessing the summary segments by linking a recipient to the storage medium and (See Fig. 2/ items 52 browsing (SFB) module 52 and graphical user interface module 82; col. 9 lines 9 -26 – “The analysis module 42 performs an analysis of the programs 38 using information obtained from (i) automatic audio-video analysis

methods on the basis of low-level features that are extracted from the program(s), (ii) event detection techniques, (iii) data that is available (or extractable) from data sources or electronic program guides”), where the summary segments may be accessed by linking the user to the data storage unit 50. Figures 4 -12 show examples of an audiovisual interface and more specifically Figures 9 and 10 show summary options, as well as segments of programs that may be displayed, as well as key frames (see col. 13 line 65 – “An example of an audiovisual interface is shown in FIGS. 4-12” – col. 14 line 40 – “a character/object view may likewise be displayed, as desired.”)

supplying the summary segments in lieu of program segments on demand of the lo recipient (The user interacts with the graphical user interface see Fig. 2/item 82 and description on it also see col. 10 line 25 -31 – “The user can then view the summary the next morning to quickly discover the baby's looks, and playback segments between the key-frames of the summary to catch a glimpse of the crying baby. The system may also record the tape content onto the system hard drive (or storage device) so the video summary can be viewed quickly.”).

Regarding claim 2, Sezan teaches:

providing from a program source includes delivery of the streaming program to the recipient by a broadband wired access link (see Fig. 2/ items 38 and 42; the link includes cable television – broadband wired link and Internet broadcasts, which may be sent via broadband link. (see col. 7 lines 56 -59 – “suitable source, such as for example broadcast television, cable television, satellite television, digital television, Internet

broadcasts, world wide web" – col. 8 lines 8 – 10 – "The system 16 may include any device(s) suitable to receive any one or more of such programs 38").

Regarding claim 4, Sezan teaches the step of accessing the summary segments by indexing and key-frames as described above in claim 1, as well as, providing time stamps (see col. 4, lines 40 - 67 – "program views may contain a set of fields that contain data for the identification of key frames, segment definitions between shots, highlight definitions, video summary definitions, different lengths of highlights").

The method of claim 11, where the step of:

The method of claim 1, comprising a step off the step of supplying includes providing a summary channel to transmit summaries and summary segments to the recipient. This is a communication channel (col. 7, lines 37 - 41 - "Thus, a server of programs serves the appropriate views according to a particular viewing system's capabilities, which may be communicated over a network or communication channel connecting the server with user's viewing device", where the user's device may display an interface for displaying summaries and summary segments – see Figs. 4 – 12 and col. 13 line 65 to col. 14, line 40).

Regarding claim 14, Sezan teaches:

The method of claim I, comprising the step of: activating a link is by a single step action – The user "selecting" one of the various links shown in the audiovisual interface – (see Figs. 4 – 12 and col. 13 line, 65 to col. 14, line 40).

Regarding claim 15, Sezan teaches:

The method of claim 14, where by the step of: 2 activating a link is by a single step action that is a step of pushing a button on a remote controller. Remote controller is disclosed in the reference, where selecting a link on an interface display is inherent to the features of a remote control in audiovisual system (see col. 11 line, 36 – “The remote may likewise control audio systems”).

Regarding claim 18, Sezan teaches:

The method of claim 1, where the step of:

accessing the summary segments includes setting position marks in the program to define summaries it is defined by primarily by time stamps, as well as, key frames and indexing – as describe above.

Regarding claim 19, Sezan teaches:

The method of claim 1, where the step of: storing the summary segments uses a storage medium located at a user location – (see Fig. 2/ item 50 – data storage unit).

Regarding claim 20, Sezan teaches:

The method of claim 1, where the step of: storing the summary segments uses a storage medium integrated with a delivery network (see Fig. 2/ item 50 data storage unit, which received programs 38 through 42 and 44, and sends summary segments to display 80 and/or GUI 82 through the search, filtering and browsing module 52.

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

5. Claims 5, 7-10, 16 -17 and 27 - 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Rui, Yong (Rui herein after) US 20050160457 A1.

Regarding claim 5, Rui discloses:

providing the programming to the recipient via a program channel (see Fig. 3/items 226 – audio/video data provider and 228 – meta data provider; and [0022] lines 2 - 9 "including a terrestrial television broadcasting system 108 which can broadcast analog or digital signals that are received by antenna 110; a satellite broadcasting system 112 which can transmit analog or digital signals that are received by satellite dish 114; a cable signal transmitter 116 which can transmit analog or digital signals that are received via cable 118; and an Internet provider 120 which can transmit digital signals that are received by modem 122 via the Internet (and/or other network) 124. Both analog and digital signals can include programming made up of audio, video, and/or other data");

applying index markers to the programming to divide the programming into segments – Meta data is associated with a program. In this particular reference the meta data is described as being "excited segment probabilities" and ([0041] lines 3 – 4

–“which identify particular segments of the program and a corresponding probability or likelihood that each segment”);

generating summary segments of parts of the programming segments and having index markers corresponding to the index markers of the programming;

generating metadata files associated with a summary channel for delimiting beginning and end of segments in the summary and program channels and including indexing information for facilitating links between the programming segments and the summary segments;

selecting a summary segment by activating a link between the programming segment and the summary segment by utilizing a metadata file included with the 15 summary channel; and [0094] lines 3 -4 – “an indication of the segments they correspond to, are stored as the meta data 224 of FIG. 3).

transmitting a selected summary segment and associated metadata to the recipient via a summary channel (see [0096] lines 1 - 4 - Once the probabilities that segments are exciting are identified, the user can choose to view a summary or highlights of the program. Which segments are to be delivered as the summary can be determined locally (e.g., on the user's client computer) or alternatively remotely (e.g., on a remote server”).

Regarding claim 7, Rui discloses:

The method of claim 5, comprising a step of: including user data with each group of pictures corresponding to program segments The parameters of the summary identify what level of summary the user desires and can vary by implementation (see [0099]

lines 1 – 2 – “the user request for a summary is received along with parameters for the summary”.

Regarding claim 8, Rui discloses:

The method of claim 5, comprising a step of: activating a link connection by a single physical command (see Fig. 2/142, 178 and 180 – [0029]lines, 4 – 6 – ” A user may enter commands and information into computer 142 through input devices such as keyboard 178 and pointing device 180”.

Regarding claim 9, Rui discloses:

The method of claim 5, comprising a step of: including in the step of generating summary, segments a step of dynamically generating summaries of live programming in real-time by dynamic editing software - generating summary including all steps in Fig. 7 (see 0098] lines 3 – 4 may – “may be implemented in software, and may be carried out by a receiver 106 of FIG. 1 or alternatively a programming source of FIG. 1 (e.g., Internet provider 120).)

Regarding claim 27, Rui discloses audio/video programming content is made available to a receiver from a content provider. The claimed source of programming of programs is met by different sources of programming (see Fig. 3/items 226 – audio/video data provider and 228 – meta data provider; and [0022] lines 2 - 9 “including a terrestrial television broadcasting system 108 which can broadcast analog or digital signals that are received by antenna 110; a satellite broadcasting system 112 which can transmit analog or digital signals that are received by satellite dish 114; a

cable signal transmitter 116 which can transmit analog or digital signals that are received via cable 118; and an Internet provider 120 which can transmit digital signals that are received by modem 122 via the Internet (and/or other network) 124. Both analog and digital signals can include programming made up of audio, video, and/or other data”), which provides programs by MPEG transport stream signal to a user (see [0037] lines 1 – 4 – “The data 222 and 224 can be made available by providers 226 and 228 in any of a wide variety of formats. In one implementation, data 222 and 224 are formatted in accordance with the MPEG-7 (Moving Pictures Expert Group) format.”). Rui includes a wide variety of meta data that is associated with a program. Meta data is able to identify particular segments of the program (see [0039] lines 5-7 – “The processing of data 222 and 224 can vary, and can include, for example, separating the data for delivery to different renderers”). The claimed storage medium ... is met by variety of storage media that are used to store video and audio data with meta data files (see 0040] lines 1 – 6 – “Client 220 is illustrated as separate from providers 226 and 228. This separation can be small (e.g., across a LAN) or large (e.g., a remote server located in another city or state). Alternatively, data 222 and/or 224 may be stored locally by client 220, either on another device such as an analog or digital video recorder (not shown) coupled to client 220 or within client 220 (e.g., on a hard disk drive)”. The claimed control interface for enabling user requests for summaries is met (see Fig. 2/163 – control interface and [0096] lines 1 – 2 – “the user can choose to view a summary or highlights of the program”). Rui discloses metadata file included with the streaming program for defining corresponding program and summary segments (see

[0023] lines 1 – 8 – “programming content made available to system 102 includes audio and video programs as well as meta data corresponding to the programs. The meta data is used to identify portions of the program that are believed to be exciting portions, as well as how exciting these portions are believed to be relative to one another. The meta data can be used to generate summaries for the programs, allowing the user to view only the portions of the program that are determined to be the most exciting”).

Regarding claim 28 and 29, Rui discloses storage located to the public network and located in a STB. This storage is located on (see Fig. 106/160, 164 - computer 142; and [0027] lines 2 – 3 – “computer that can perform the functions of receiver 106 of FIG. 1, or of one of the programming sources of FIG. 1”).

Regarding claim 30, Rui discloses an interactive control for summary selection (see Fig. 2 / 165, 178 through 192 and 188; and [0096] lines 1-4 – “ the user can choose to view a summary or highlights of the program. Which segments are to be delivered as the summary can be determined locally (e.g., on the user's client computer) or alternatively remotely (e.g., on a remote server).”).

Regarding claim 31, Rui discloses two-way interaction (see [0099] lines 4 – 5 – “a user may indicate as the summary parameters that he or she wants to be presented with any segments” and based on these parameters the portions of program rendered for a user (see [0095] lines 1-7 – “The actual portions of the program rendered for a user as the summary of the program are based on these exciting segments 288”).

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sezan.

Regarding claim 3, Sezan discloses supporting the MPEG-7 standard. However, the Examiner takes Official Notice that it is notoriously well known in the art of broadband communication and/or other forms of video distribution to provide a streaming program signal according to the MPEG-2 standard for the advantages of adhering to a well known, used and accepted standard for providing transport stream compression and efficiency. In addition, since Sezan reference is using MPEG – 7 standard, one of ordinary skill in the art would have easily been aware of the MPEG – 2 standard. Therefore, it is submitted that it would have been included using MPEG-2 standard for the advantages given above.

Regarding claim 6, see discussion above.

8. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over as Rui as applied to claim 1 above, and further in view of Sezan.

Regarding claim 10, Rui does not disclose language is used for constructing metadata file. However Sezan discloses (see col. 14 lines, 1 – 3 - An example of the

description schemes is shown below in XML. The description scheme may be implemented in any language and include any of the included descriptions (or more), as desired).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Rui's way for constructing meta data with Sezan's technique of using XML to facilitate the sharing of structured data across different information systems.

9. Claims 12 – 13 and 23 – 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sezan as applied to claim 1 above, and further in view of Seidman; David Israel US 6298482 B1.

Regarding claim 12 above, Sezan discloses step of accessing by linking includes use of a one-way video link by viewing channel as described above in claim 11 and selecting that program based on the preview channel. Sezan discloses that Internet broadcasts, world wide web and Internet services may be used in the system (col. 7 lines 59 – 67 – "Internet broadcasts, world wide web, digital video discs, still images, video cameras, laser discs, magnetic media, computer hard drive, video tape, audio tape, data services, radio broadcasts, and microwave communications. The program description stream may originate from any suitable source, such as for example PSIP/DVB-SI information in digital television broadcasts, specialized digital television data services, specialized Internet services, world wide web"), but does not explicitly disclose the use of video hyperlinks. Seidman teaches – the use of video hyperlinks as described in col. 8 lines 23 – 27 – "The embedded data is offered to the viewer by

display of a "hyperlink". When the user selects a hyperlink for the delivery of a unit of embedded data, a selection history record (SHR) is written to the selection history (SH 15").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to further modify the method of linking as disclosed by Sezan with the further teachings of using video hyperlinks as disclosed by Seidman to make such modification since hyperlinks are well known for use in video and computer system for providing instant feedback on a user's selection.

Regarding claim 13 above, Sezan discloses links as described above in claim 12, but does not explicitly disclose the use of video hyperlinks, whereas Seidman teaches using video hyperlinks as described in claim 12 above.

Regarding claim 23 - 24 above, Sezan does not disclose the use of interrupts. The Seidman discloses the use of interrupts (see col. 11 lines 9 -11 – "When this queue is found to be non-empty, its contents are read by the microprocessor"). Seidman discloses that program segments may be viewed that are already in progress from the point of entry or the content or the segment is stored prior to viewing and viewing the segment from the start is performed when the user is ready (see col. 9 lines 47 – 67 – "the user selects a set of program segments, which may or may not overlap in the time of their broadcast for display. If there is display overlap, storage may be required, as described above" and col. 10 lines 1 – 19 – "the program segment selection may be done for the user automatically, by the STB. Using the selection history summary information, the STB can select among the available program segments, provided they

are associated with keywords identifying their topic areas (to enable the STB to choose among them"). Seidman and Sezan do not disclose an interrupt command delivered over an interrupt channel I and recovering a summary of missed programming due to the interruption in delivery in response to a resume command supplied over the I channel. However, the examiner takes Official Notice that it is notoriously well known in the art of program interrupts to provide a resume command over the interrupt channel for the advantage of recovering the missed programming. Therefore³, it is submitted that it would have been clearly obvious to one of ordinary skill in the art at the time of the invention to have included a resume command supplied over the interrupt channel for the reason given above.

Regarding claim 25, Seidman discloses that the user may interact with a control for providing a missed/interrupted program by means of a screen display responsive to a remote (see col. 10, lines 12 -19 and col. 6, lines 52 – col. 12, line 3).

Regarding claim 26, Sezan does not specifically disclose providing programming control of the user. Seidman teaches providing programming control including a screen display responsive to an interactive control of the user as described in col. 6 lines 30 - 32, col. 9, lines 57 – 64 and col. 11, lines 52 – col. 12, line 3).

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. US application US 20050086703 A1 includes a plurality of set-top boxes that receive broadcast programming and segmentation data from content and

information providers. US patent 5442390 includes a system for interactively viewing videos, a selected video is transmitted as a plurality of frames of digitized video data for playback on a viewing device.

Examiner's Note

The referenced citations made in the rejection(s) above are intended to exemplify areas in the prior art document(s) in which the examiner believed are the most relevant to the claimed subject matter. However, it is incumbent upon the applicant to analyze the prior art document(s) in its/their entirety since other areas of the document(s) may be relied upon at a later time to substantiate examiner's rationale of record. A prior art reference must be considered in its entirety, i.e., as a whole, including portions that would lead away from the claimed invention. *W.L. Gore & associates, Inc. v. Garlock, Inc.*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), cert. denied, 469 U.S. 851 (1984). However, "the prior art's mere disclosure of more than one alternative does not constitute a teaching away from any of these alternatives because such disclosure does not criticize, discredit, or otherwise discourage the solution claimed...." *In re Fulton*, 391 F.3d 1195, 1201, 73 USPQ2d 1141, 1146 (Fed. Cir. 2004).

Contact

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jivka Rabovianski whose telephone number is (571) 270-1845. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vu Le can be reached on (571) 270-1845. Customer Service can be reached at (571) 272-2600. The fax number for the organization where this application or proceeding is assigned is (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR.

Application/Control Number:
10/824,663
Art Unit: 2623

Page 17

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jivka Rabovianski/

SRIVASTAVA VIVEK

November 21, 2007

/SPE/


ANDREW Y. KOENIG
PRIMARY PATENT EXAMINER